2014 UTAH BOARD OF OIL, GAS AND MINING EARTH DAY AWARDS

Nomination Form

Nominee Information

Kennecott Utah Copper 4700 Daybreak Parkway South Jordan, Utah, 84095

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Project: Copperton High Line reclamation

Activity and Category (Please check one activity and one category)

Activity

- Oil and Gas
- Minerals
- Coal

Category

- Environmental improvement to an active mine site, drilling or recovery site, or field
- Outstanding results following applications of innovative environmental technology
- Outstanding final reclamation or site restoration
- Best practices
- Other

Nominated By

Same as Nominee

Nomination Summary

See attached

Utah Board of Oil, Gas and Mining 2014 Earth Day Award Nomination

Rio Tinto Kennecott Copperton highline remediation

Business context

Rio Tinto Kennecott is located in the foothills of the Oquirrh Mountains in Utah's Salt Lake Valley. Our mine has been a fixture in the Salt Lake Valley for more than 111 years. We mine and refine copper, gold, silver and molybdenum.

Rio Tinto Kennecott is committed to sustainable development. Through this commitment and associated actions, we strive to be a leader in environmental, social and economic performance by demonstrating good stewardship of natural resources, by reducing our environmental footprint, and by trying to meet community expectations to support sustainable development. It is about meeting the needs of today's generation without compromising the needs of future generations.

In order to communicate what sustainable development means to us, we developed a framework that outlines the aspects of sustainable development that are most material to our operation. One key aspect of our sustainable development framework is environmental stewardship. Wherever possible, we prevent, or otherwise minimize, mitigate or remediate any potentially harmful effects of our operations on the environment. This practice creates and sustains our business value and reputation. We set self-imposed environmental targets to drive continual improvement. Through our commitment and actions, we strive to be a leader in environmental performance by demonstrating good management of natural resources, responsibly reducing our environmental footprint and exceeding community expectations for sustainable development.



The Salt Lake Valley looking north.

Project description

Kennecott has spent over \$2.5 million on remediation and reclaimation the Copperton High Line. This involved the removal of slag rail ballast containing elevated levels of lead and arsenic, restoring natural drainages, and recountouring the landscape and planting natural vegetation.

The Copperton High Line was a ore haulage rail line that transported ore from Bingham Canyon to the Bonneville Crusher and Arthur Concentrator near Magna, Utah.

Under DOGM regulation we were required to remove the rail, reestablish permanent drainage and stabilize open cuts. While Kennecott was obligated to conduct much of this work, we went above and beyond the requirements in the following ways:

- 1. More than reestablishing drainage: In addition to reestablishing drainage by removing culverts, we completely removed the fill material from the drainages so they could be reshaped to look natural.
- 2. **More than removing rail highwalls:** Instead of recontouring to an approved slope angle, we then took the fill material from the drainages and placed it back in the rail cuts to reshape the area back to a more natural landscape



Overview of the project area.

▼ 1 Before

The slopes were too steep to grow vegetation and did not fit with the overall visual landscape.



▼ 2 After

The remediation and reclamation returned the landscape to a more natural condition and was reseeded using native plant seed.





∢ 1

Before

The railgrade cut collected stormwater and did not fit the natural contours of the native landscape.



₹ 2

After

Material from drainages was relocated to fill the rail cut, making natural shaped contours that effectively managed stormwater runoff.



In the process of removing fill material. Southwest view.



▼ Harkers Drainage

Post removal and final landscape. Northwest view.

